

# **OFDM RECEIVER AND ITS FREQUENCY OFFSET COMPENSATION METHOD**

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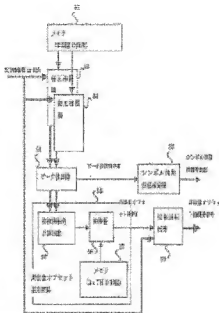
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Abstract of JP 2001036500 (A)

**PROBLEM TO BE SOLVED:** To provide an OFDM receiver where a frequency offset compensation range can be extended. **SOLUTION:** The OFDM receiver that receives and demodulates an OFDM signal with a start symbol added thereto prior to a data symbol is provided with a memory means 51 that stores N kinds (N is a natural number being 2 or over) of reference signals equivalent to part in the start symbol, cross-correlation means 52, 53 that calculate a cross-correlation between the OFDM signal and N kinds of the reference signals, a peak position detection means 54 that detects a peak position of N-sets of the cross-correlation values obtained by the cross-correlation means 52, 53, and a frequency offset estimate means 55 that estimates a frequency offset on the basis of the cross-correlation at N-sets of the peak positions. The OFDM receiver compensates the frequency offset of the OFDM signal on the basis of the frequency offset estimated by the frequency offset estimate means 55.



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